

**TRANSLATION OF  
NOTICE OF REJECTION**  
(First Official Action)

Date: December 11, 2009

Mailing Date: December 15, 2009

Examiner: Seiji Sakano

Japanese Patent Application No. 2006-527421

The captioned application is deemed to be rejected due to the following reasons. Should the applicant have its opinion thereagainst, however, a written opinion has to be submitted within 3 months from the mailing date.

REASON 1 (Novelty)

The claims below of the application are deemed to be the same as the disclosures in the following publications circulated prior to the filing date of the application (the Convention date), therefore not to be entitled for patent according to the provision of Art. 29(1)(iii) of the Patent Law.

REASON 2 (Inventive Step)

The claims below of the application are deemed to be easily conceivable by those skilled in the art on the basis of the following publications circulated prior to the filing date of the application (the Convention date), therefore unpatentable in line with the provision of Art. 29(2) of the Patent Law.

Documents cited

D1: US2002/0077414

D2: JP2001342451 (partially corresponding to EP1158021)

D3: JP9503241 (corresponding to WO9509874)

Note:

Claims 1 to 39/D1

D1 discloses use of "cross-linked rubber particles produced by conversion of rubber latices with chemicals having a cross-linking function" as "polymer fillers in rubber and thermoplasts" (Claims 1 and 4). Moreover, D1 has working examples where "Renopol L" (a mineral oil-based plasticizer) is formulated in a compound including the cross-linked rubber particles (0029). D1 also describes the rubber particles are on the basis of BR, SBR, NBR, IR and CR (Claim 2). In addition, D1 shows the rubber latices are produced by emulsion polymerization (0013), that the particle diameter of the polymerisates used for cross-linking is preferably within the range of 20 to 600 nm (0014), that the gel content of the cross-linked rubber particles is usually more than 50 wt.% (0017), and that the swelling index (Qi) of the cross-linked polymers in toluene is 1 to 50 (0019). Further, D1 has

working examples where zinc oxide and stearic acid are formulated (0029).

Although claims 4 to 6 and 13 of the present application recite the properties of "microgel (B)", such properties would be ordinary physical properties of a rubber latex produced by emulsion polymerization. Moreover, claims 22, 23, 38 and 39 specify a mixing means, which appears to be a well known one. Under such circumstance, such recitations would not provide the present invention with novelty and inventive step.

Claim 20 describes the weight rate of a "non-crosslinkable organic medium (A)" and claim 24 recites the viscosity of the composition, but adjustment of the weight rate or viscosity would not have difficulty.

Claims 1 to 3, 7, 12, 16, 18 to 24, and 27 to 39/D2

D2 discloses a thickener comprising microgel having an average particle diameter of 0.1 to 1,000  $\mu\text{m}$  (claim 1) and, in working examples, compositions containing the thickener and various organic media (Examples 17 to 30).

Claims 1 to 8, 11 to 13, 16 to 24, 27 to 33 and 35 to 39/D3

D3 shows microgel obtained from "a microdispersion of acrylic particles" (claim 16). D3 also describes the microgel is obtained by preliminarily drying the microdispersion, and then transferring the constituent particles of the microdispersion to a solvent for PMMA, or condensing the microdispersion and adding the solvent to the microdispersion (claim 16). Moreover, D3 discloses the solvent for PMMA is, for example, butyl acetate or the like (claims 17 and 18). Further, D3 describes the weight concentration of the polymer in the solvent for PMMA is less than 30% and preferably within the range of 10 to 20% (claim 19). In addition, D3 shows the dispersion is composed of particles having a size of less than 120 nm (usually about 80 nm) and a low polydispersity index of 1.1 to 1.2 (page 6, lines 6 to 8). Furthermore, D3 discloses the microgel is used in a nail polish (claim 20).

#### REASONS 3 to 5 (Description Requirements)

The subject application does not satisfy the requirements as provided in Art. 36(4)(i) & (6)(i) & (ii) of the Patent Law since the specification and the claims below are deemed to be defective in the following.

Note:

Reasons 3 and 4 (Lack of Enablement and Insufficient Disclosure)

Claims 33 and 35 to 37

The present specification discloses in working examples only that the composition of the present invention can be used as a lubricant, and does not sufficiently support that the composition can also be used in different uses recited in those claims.

Thus, the specification does not clearly and sufficiently disclose the subject matter of those claims to such an extent that an artisan can implement it. Moreover, the subject matter is not shown in the specification.

Reason 5 (Lack of Clarity)

Claims 9, 10, 13, 17, 22 and 36

(1) Claims 9, 10, 13 and 36 are indefinite due to the term "about" or "in particular", which is not allowable in Japan.

(2) Claim 17 recites "functional groups which are reactive towards C=C double bonds". However, it is unclear what groups are encompassed in the scope of the functional groups.

(3) Claim 22 specifies an "Ultra-Turrax apparatus". However, it is ambiguous what is the apparatus. If the apparatus was well known at the time of the priority date of the present application, please argue the fact and submit a technical document supporting it.

(4) Claim 30 recites "use of the composition of the present invention for the preparation of microgel-containing polymers". However, the meaning is unclear.

More specifically, it is indefinite whether the recitation means change of the physical properties of the polymer containing microgel by formulating the composition in the polymer or other matter.

Claims 31 and 32 are also unclear for the same reason.

**D2****METHOD FOR MANUFACTURING THICKENER AND COSMETIC**

Publication number: JP2001342451 (A)

Publication date: 2001-12-14

Inventor(s): MIYAZAWA KAZUYUKI; NAKAMURA TADASHI; KANEDA ISAMU; HARIKI TOSHIO

Applicant(s): SHISEIDO CO LTD

Application number: JP20010003875 20010111

Priority number(s): JP20010003875 20010111; JP20000002610 20000111; JP20000094307 20000330

INPADOC patent family: EP1158021

**Abstract**

**PROBLEM TO BE SOLVED:** To provide a new-type thickener giving no sticking feeling nor squeaky feeling, having excellent handleability, free from causing viscosity loss even in the case where it is highly compounded with a water-soluble drug component or slat, and stale for a long period so that a phenomenon such as water separation does not occur. **SOLUTION:** A method for manufacturing the thickener by dissolving a hydrophilic compound having gelling ability, or a hydrophilic compound having gelling ability and a thickening compound having no gelling ability in water or an aqueous component, subsequently leaving the resulting solution for cooling to form gel, and then pulverizing the gel into microgel having an average particle size of 0.1-1,000  $\mu\text{m}$  to prepare the thickener. The thickener obtained by the method, and a cosmetic containing the thickener.

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**D3**

Stable microdispersions and microgels based on acrylic polymers, method for obtaining them and compositions, particularly cosmetic compositions, containing them

Publication number: JP9503241 (T)

Publication date: 1997-03-31

Inventor(s): KUENTZ ANNIE; RIESS HENRI-GERARD; MEYBECK ALAIN; TRANCHANT JEAN-FRANÇOIS

Applicant(s): LVMH RECH

Application number: JP19940509412T 19940930

Priority number(s): WO1994FR01145 19940930; FR19930011705 19931001

INPADOC patent family: US5711940; WO9509874; EP0721472

Abstract of corresponding document: US 5711940 (A)

PCT No. PCT/FR94/01145 Sec. 371 Date Jun. 12, 1996 Sec. 102(e) Date Jun. 12, 1996 PCT Filed Sep. 30, 1994 PCT Pub. No. WO95/09874 PCT Pub. Date Apr. 13, 1995 The invention relates to a process for the preparation of a stable microdispersion of particles comprised of acrylic polymers in an organic solvent used as reaction medium in the presence of a stabilizing agent comprised of a block copolymer, characterized in that said acrylic polymer is obtained by radical polymerization of at least one acrylic monomer in the presence of a block copolymer based on polymethyl methacrylate (PMMA) and polytert-butyl acrylate (PtBuA). It also relates to microdispersions which may be obtained by said process as well as to microgels produced from said microdispersions and compositions, particularly cosmetic compositions such as nail varnish.

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